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EXAMINER	
DAVENPORT, MON CHERI S	

ART UNIT	PAPER NUMBER
2416	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No.	Applicant(s)	
	10/716,180	BOSE ET AL.	
	Examiner	Art Unit	
	MON CHERI S. DAVENPORT	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21,24-35 and 38-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21,24-35 and 38-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/3/2008 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. **Claims 26, 38, 39, and 41** rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding **Claims 26, 38, 39, and 41**, now requiring "comprise communication standards CDMA, EDGE and WCDMA." This is subject matter which was not described in the original specification; therefore, new matter. Neither applicant has pointed out where in the original specification support for the subject addition can be found.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 1-21 and 24-35** rejected under 35 U.S.C. 103(a) as being unpatentable over Burke et al. (US Patent Number 5,406,643) in view of Palm (US Patent Number 6,735,245).

Regarding **claims 1, 8, 15, 40 and 44** Burke et al. disclose an apparatus for allocating channels, comprising:

a memory that stores executable instruction signals(see fig. 2, section 14, ROM); and

a processor that executes the instruction signals to (see fig. 2, section 16, CPU):

determine available channels(see col. 2, lines 44-48, The packet server maintains a session list identifying currently available connections (virtual links) to a specific end point, (see col. 2, lines 25-29, a subscriber unit to select from amongst a plurality of communications media, that particular media for establishing a communications path to a specified end point); and

allocate a channel based on the available channels and the communication standard used by the received first and second wireless message(see col. 2, lines 49-53, The device manager maintains a list specifying the possible communications paths to specific end points and actually controls the communications resources responsible for establishing a communications path).

However over Burke et al. fail to specifically point out receiving a message having a format that is in compliance with a communication standard, and determine the communication standard used by the received first and second wireless message according to the format of the received first and second wireless message, allocate a channel based on the available channels and the communication standard used by the received message as claimed.

Palm teaches receiving a first and second wireless message having a format that is in compliance with a communication standard, and determines the communication standard used by the received first and second wireless message according to the format of the received first and second wireless message, and allocate a channel based on the available channels and the communication standard used by the received first and second wireless message(see col.4-5, lines 63-5, determines the communication standard, of the received examination negotiation information, see col. 5, lines 20-23- the negotiation information being in compliance to a communication standard, the format of the negotiation information reveals the communication standard of the negotiation message);

Palm teaches allocate a channel based on the communication standard used by the received first and second wireless message (see col. 4, lines 44-53, auditing a condition of the communication channel, and selection based on the communication standard and the capability).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention n was made to combine Burke et al.'s invention with Palm's invention, because Palm invention detects various configuration capabilities and limitations of a

communication channel, to determine an appropriate communication standard appropriate for the existing line conditions (see palm, col. 2, lines 47-51).

Regarding **Claims 2, 9 and 16** Burke et al. discloses everything as applied above (*see claims 1, 8 and 15*). In addition the method, apparatus, and article includes:

send a notification to use the channel(see col. 2, lines 38-39, see fig. 7, section 88, establishing a connection, see also col. 7, lines 35-39, flow proceeds to block 90 where packet server 34 establishes the communication path connection(reads on notification to use channel) in preparation for transmission of information).

Regarding **Claims 3, 10 and 17** Burke et al. discloses everything as applied above (*see claims 2, 9 and 16*). In addition the method, apparatus, and article includes:

wherein to send an instruction comprises sending an instruction to a software-defined signal processing system to allocate the appropriate channel for the received message(see col. 7, lines 35-39, establishes the communication path connection in preparation for transmission of information between software application)

Regarding **Claims 4, 11 and 18** Burke et al. discloses everything as applied above (*see claims 1, 8 and 15*). In addition the method, apparatus, and article includes:

wherein the spectrum of channels includes a channel dedicated to AMPS(see col. 3, lines 50-54, Communications paths 4, 6, and 8 may consist of wireless or wireline communications media such as, but not limited to, telephone lines, twisted pair wire, fiber-optic links, infrared channels, and radio frequency channels, AMPS is included as wireless).

Regarding **Claims 5, 12 and 19** Burke et al. discloses everything as applied above (*see claims 1, 8 and 15*). In addition the method, apparatus, and article includes:

wherein the received message is a call (see col. 2, lines 28-29, establishing a communication path reads on message is a call)).

Regarding **Claims 6, 13 and 20** Burke et al. discloses everything as applied above (*see claims 1, 8 and 15*). In addition the method, apparatus, and article includes:

wherein the received message is a message that is received through an antenna (see col. 2, lines 26-29, establishing a communication path reads on a message is received, see col. 3, lines 50-54, communication paths are wireless, therefore message is received through an antenna).

Regarding **Claims 7, 14 and 21** Burke et al. discloses everything as applied above (*see claims 1, 8 and 15*). In addition the method, apparatus, and article includes:

wherein the received message for transmission(see col. 2, lines 49-53, The device manager maintains a list specifying the possible communications paths to specific end points and actually controls the communications resources responsible for establishing a communications path, this reads on the message is being processed to determine the communication path for transmission).

Regarding **Claims 24** Burke et al. discloses everything as applied above (*see claim 8*).

wherein the processor sends an instruction to allocate a channel dedicated to the communication standard for communicating with a mobile device that sent the message (see col. 2, lines 49-53, the device manager maintains a list specifying the possible communications paths to specific end points and actually controls the communications resources responsible for establishing a communications path, see col. 4 lines 18-26, control information are communicated to the media communication equipment(mobile device) enabling to communicate over communication control paths)).

Burke et al. fails to specifically point out a processor sends an instruction to allocate a channel dedicated to the communication standard as claimed.

Palm teaches a processor sends an instruction to allocate a channel dedicated to the communication standard (see col. 4, lines 44-53, auditing a condition of the communication channel, and selection based on the communication standard and the capability).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention n was made to combine Burke et al.'s invention with Palm's invention, because Palm invention detects various configuration capabilities and limitations of a communication channel, to determine an appropriate communication standard appropriate for the existing line conditions (see palm, col. 2, lines 47-51).

Regarding **Claims 25, 31 and 35** Burke et al. discloses everything as applied above (*see claims 24, 30, and 33*).

wherein the processor sends an instruction to a software-defined signal processing device to send another message to the mobile device to use the allocated channel (see col. 4, lines 51-66, the send_message function interface with packet server through external software delimited by the runtime engine, which provides the ultimate path selection)

Regarding **Claims 26** Burke et al. discloses everything as applied above (*see claim 8*).

wherein the communication standard comprises at least one of advance mobile phone service (AMPS), global system for mobile communications (GSM), code division multiple access (CDMA), enhanced data rates for GSM evolution (EDGE) and wideband code division multiple access (WCDMA) standard (see col. 3, lines 50-54, Communications paths 4, 6, and 8 may consist of wireless or wireline communications media such as, but not limited to, telephone lines, twisted pair wire, fiber-optic links, infrared channels, and radio frequency channels, AMPS is included as wireless).

Regarding **Claims 27 and 28** Burke et al. discloses everything as applied above (*see claim 8*).

the processor allocates channels dedicated to the communication standards associated with the messages (see col. 2, lines 49-53, The device manager maintains a list specifying the possible communications paths to specific end points and actually controls the communications resources responsible for establishing a communications path).

However Burke et al. fails to specifically point out wherein the processor receives messages having formats that are in compliance with communication standards, at least some of different messages complying with different communication standards;

processor dynamically responds to the messages to utilize spectrum according to a current usage pattern as claimed.

Palm teaches wherein the processor receives messages having formats that are in compliance with communication standards, at least some of different messages complying with different communication standards standard; processor dynamically responds to the messages to utilize spectrum according to a current usage pattern (see col. 4, lines 44-53, auditing a condition of the communication channel, and selection based on the communication standard and the capability, see also col. 5, lines 63-67, analyzing the channel information (utilized spectrum and current usage pattern), in conjunction with exchanged negotiation information and received channel information, by a processor of the received message)

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Burke et al.'s invention with Palm's invention, because Palm invention detects various configuration capabilities and limitations of a communication channel, to determine an appropriate communication standard appropriate for the existing line conditions (see palm, col. 2, lines 47-51).

Regarding **Claims 29** Burke et al. discloses everything as applied above (*see claim 8*).

However Burke et al. fails to specifically point out wherein the processor determines frequencies licensed to a user of the message as claimed.

Palm teaches wherein the processor determines frequencies licensed to a user of the message (see col. 2, lines 9-14, the frequency characteristics is useful prior to connection of the communication link).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Burke et al.'s invention with Palm's invention, because Palm invention detects various configuration capabilities and limitations of a communication channel, to determine an appropriate communication standard appropriate for the existing line conditions (see palm, col. 2, lines 47-51).

Regarding **Claim 30** Burke et al. discloses everything as applied above (*see claim 29*).

wherein the processor chooses from a list of available channels a channel that meets at least one of the frequency requirement and a bandwidth requirement (see figure 7, selecting from a list of available channels, see also col. 11, lines 10-17, in memory is a list of possible communication paths for automatic selection based on communication criteria defined by software, which includes frequency and bandwidth requirement).

Regarding **Claim 32** Burke et al. discloses everything as applied above (*see claim 8*).

wherein the received message comprises a short-message, text, a housekeeping signal, or intended consumer signals(see col. 3-4, lines 50-26, communication between devices of the system are capable and include , short-message, text, housing keeping signal or consumer signals).

Regarding **Claims 33 and 34** Burke et al. discloses everything as applied above (*see claims 14 and 33*).

wherein the message comprises a broadcast (see col. 3, lines 50-54, the communication paths consist of radio frequency channels which is capable of sending a broadcast and receiving to a mobile device, see also col. 2, lines 49-53, The device manager maintains a list specifying the possible communications paths to specific end points and actually controls the communications resources responsible for establishing a communications path).

Regarding **Claim 38** Burke et al. discloses everything as applied above (*see claim 8*).

wherein the processor receives messages having formats that are in compliance with communication standards, at least some of different messages complying with different communication standards comprising at least two of advance mobile phone service (AMPS), global system for mobile communications (GSM), code division multiple access (CDMA), enhanced data rates for GSM evolution (EDGE) and wideband code division multiple access (WCDMA) standard, (see col. 3, lines 50-54, Communications paths 4, 6, and 8 may consist of wireless or wireline communications media such as, but not limited to, telephone lines, twisted pair wire, fiber-optic links, infrared channels, and radio frequency channels, AMPS is included as wireless)

However Burke fails to specifically point out the processor allocates channels dedicated to the communication standards associated with the messages as claimed.

Palm teaches the processor allocates channels dedicated to the communication standards associated with the messages (see col. 4, lines 44-53, auditing a condition of the communication channel, and selection based on the communication standard and the capability).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention n was made to combine Burke et al.'s invention with Palm's invention, because Palm invention detects various configuration capabilities and limitations of a communication channel, to determine an appropriate communication standard appropriate for the existing line conditions (see palm, col. 2, lines 47-51).

Regarding **Claim 39** Burke et al. discloses everything as applied above (*see claim 8*).

wherein the processor receives messages having formats that are in compliance with communication standards, at least some of different messages complying with different communication standards comprising at least two of advance mobile phone service (AMPS), global system for mobile communications (GSM), code division multiple access (CDMA), enhanced data rates for GSM evolution (EDGE) and wideband code division multiple access (WCDMA) standard(see col. 3, lines 50-54, Communications paths 4, 6, and 8 may consist of wireless or wireline communications media such as, but not limited to, telephone lines, twisted pair wire, fiber-optic links, infrared channels, and radio frequency channels, AMPS is included as wireless),

Burke et al. fails to specifically point out the processor dynamically responds to the messages to utilize spectrum according to a current usage pattern as claimed

Palm teaches the processor dynamically responds to the messages to utilize spectrum according to a current usage pattern(see col. 4, lines 44-53, auditing a condition of the communication channel, and selection based on the communication standard and the capability, see also col. 5, lines 63-67, analyzing the channel information (utilized spectrum and current usage pattern), in conjunction with exchanged negotiation information and received channel information, by a processor of the received message)

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Burke et al.'s invention with Palm's invention, because Palm invention detects various configuration capabilities and limitations of a communication channel, to determine an appropriate communication standard appropriate for the existing line conditions (see palm, col. 2, lines 47-51).

Regarding **Claim 41** Burke et al. discloses everything as applied above (*see claim 40*).

in which the first and second communication standards comprise two of AMPS, GSM, CDMA, EDGE, and WCDMA see col. 3, lines 50-54, Communications paths 4, 6, and 8 may consist of wireless or wireline communications media such as, but not limited to, telephone lines, twisted pair wire, fiber-optic links, infrared channels, and radio frequency channels, AMPS is included as wireless).

Regarding **Claims 42 and 45** Burke et al. discloses everything as applied above (*see claim 40 and 44*).

further comprising executable instructions to implement: for each of the received first and second wireless messages, sending an instruction to a software-defined signal processing device to send another message to the first or second wireless device to use the corresponding allocated channel (see col. 4, lines 51-66, the send_message function interface with packet server through external software delimited by the runtime engine, which provides the ultimate path selection).

Regarding **Claim 43** Burke et al. discloses everything as applied above (*see claim 40*).

further comprising executable instructions to implement: receiving additional wireless messages from additional wireless devices, at least some of the additional messages complying with different communication standards,

Burke et al. fails to specifically point out dynamically responding to the additional wireless messages to utilize spectrum according to a current usage pattern as claimed.

Palm teaches and dynamically responding to the additional wireless messages to utilize spectrum according to a current usage pattern (utilized spectrum and current usage pattern), in conjunction with exchanged negotiation information and received channel information, by a processor of the received message)

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine Burke et al.'s invention with Palm's invention, because Palm invention detects various configuration capabilities and limitations of a communication channel, to determine an appropriate communication standard appropriate for the existing line conditions (see palm, col. 2, lines 47-51).

Response to Arguments

Applicant's arguments filed 11/3/2008 have been fully considered but they are not persuasive.

In the remarks on pg. 10 of the amendment, the applicant contends that Palm does not teach or suggest "determine communication standard according to format of received message"

Examiner respectfully disagrees Palm teaches negotiation information being in compliance to a communication standard, the format of the negotiation information reveals the communication standard of the negotiation message.

In the remarks on pgs. 10-12 of the amendment, the applicant contends that Burke does not teach or suggest "allocate channel based on communication standard"

Examiner aggress however, Burke in view of Palm teaches allocation of channel (Burke), based on communication standard (Palm).

In the remarks on pg. 11 of the amendment, the applicant contends that Burke does not teach or suggest "the spectrum of channels includes a channel dedicated to AMPS"

Examiner respectfully disagrees Burke teaches a variety of dedicated communication paths which includes the option of a wireless AMPS channel.

In the remarks on pg. 12 of the amendment, the applicant contends that Palm does not teach or suggest "dynamically responding to message to utilize spectrum according to a current usage pattern"

Examiner respectfully disagrees Palm teaches see col. 4, lines 44-53, auditing a condition (current usage pattern) of the communication channel, and selection based on the communication standard and the capability.

In the remarks on pg. 12 of the amendment, the applicant contends that Palm or Burke does not teach or suggest "use of frequencies that are licenses to a user of a message"

Examiner respectfully disagrees Palm teaches the frequency characteristics, which are line condition information is determined to successfully establish a communication link.

In the remarks on pg. 12 of the amendment, the applicant contends that Burke does not teach or suggest "AMPS, GSM, CDMA, EDGE or WCDMA standard"

Examiner respectfully disagrees Burke teaches the Communications paths 4, 6, and 8 may consist of wireless or wireline communications media such as, but not limited to, telephone lines, twisted pair wire, fiber-optic links, infrared channels, and radio frequency channels, AMPS, GSM, CDMA, EDGE or WCDMA standard is included as wireless.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MON CHERI S. DAVENPORT whose telephone number is (571)270-1803. The examiner can normally be reached on Monday - Friday 8:00 a.m. - 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin C. Harper/
Primary Examiner, Art Unit 2416

/Mon Cheri S Davenport/
Examiner, Art Unit 2416
January 18, 2009